

XIII.—Description of a new Species of Calosoma (Coleoptera, Geodephaga). By CHAS. O. WATERHOUSE, F.E.S.

HAVING had occasion to examine the genus *Calosoma* from a geographical point of view, I was surprised not to find the following Australian species described. It is of interest as approaching in its general appearance the species from New Caledonia—*Calosoma oceanicum*. I propose to call it *C. Walkeri*.

Calosoma Walkeri, sp. n.

Statura *C. sycophantæ*, minus convexum, thorace angustiori. Nigrum, nitidum; thoracis marginibus viridi tinctis; elytris brunneo-cupreis, punctato-striatis, interstitiis parum convexis, sublævis, marginibus anguste viridibus; corpore subtus viridi-tincto; pedibus obscure piceis. ♀.

Long. 13, lat. $6\frac{3}{4}$ lin.

Hab. W. Australia, Swan River (*Macgillivray*); Roebuck Bay (*J. J. Walker*).

In general form this species resembles *C. sycophanta*, but the thorax is relatively rather narrower and the elytra are much flatter. The head is smoother, with a little green near the eyes. The thorax has the same form, but perhaps the sides are a little less sinuate posteriorly; the surface is smoother, the disk black, the rest of the surface tinted with copper, the extreme margins green. The elytra are brownish coppery, with a little green near the scutellum and on the margins; they are punctate-striate, but the striæ are only lightly impressed, and consequently the interstices are only gently convex. The usual punctures on the fourth, eighth, and twelfth interstices are very small and are only visible in some lights near the apex. The underside of the body is pitchy, with bright green reflections.

As the species of this genus are extremely difficult to determine, it may be useful to note that the type specimens of the following species are in our Natural History Museum:—

- Calosoma ampliator*, Bates. Cent. Amer.
- *lave*, var. *punctulicolle*, Bates. Cent. Amer.
- —, var. *explanaticolle*, Bates. Cent. Amer.
- —, var. *microgonum*, Bates. Cent. Amer.
- *omiltemium*, Bates. Cent. Amer.
- *diminutum*, Bates. Cent. Amer.
- *morelianum*, Bates. Cent. Amer.
- *porosifrons*, Bates. Cent. Amer.
- *galapageium*, Hope. Galapagos Is.

- Calosoma irregulare*, Walker. Vancouver.
 — *laterale*, Kirby. Brazil.
 — *retusus*, Fabr.* Patagonia.
 — *patagoniense*, Hope. Patagonia.
 — *tegulatum*, Woll. Cape Verde Is.
 — *curvipes*, Kirby. Brazil.
 — *helenæ*, Hope. St. Helena.
 — *haligena*, Woll. St. Helena.
 — *chinense*, Hope. China.
 — *maderæ*, Fabr. Madeira.
 — *frigidum*, Kirby. N. Amer.

XIV.—Puliciphora, a new Flea-like Genus of Diptera.

By FRIEDRICH DAHL, of Kiel †.

AT last we appear to be obtaining a clue to the origin of the flea: in sorting out my wholesale captures from the Bismarck Archipelago I found a Phorid which, owing to the total loss of wings and halteres, had acquired a great similarity to a flea—a similarity that appears to be by no means confined to purely external and adventitious characters. Since we are still completely in the dark concerning the question with what other family of insects the Pulicidæ are most closely allied—there has even been a dispute as to the order to which they are to be assigned—all data of this sort must be of interest.

For the form before me I establish a new genus, and since it is intermediate between the Phoridæ and Pulicidæ, I term it *Puliciphora*. I designate the species *lucifera*, since it appears for the first time to bring light to bear upon a dark matter. The genus has decided affinity to the Phoridæ, and I unhesitatingly assign it to this family. The antennæ, mouth-parts, legs, and female genital organs all agree perfectly in type with the corresponding organs of the members of the family in question. The genus, however, is distinguished from almost all other known genera of the family by the entire absence of wings and halteres, by the unusually great reduction of the thorax, and by the eyes being greatly reduced in size. The thorax, which in the winged genera of Phoridæ is much longer and thicker than the head, is here much smaller than the latter, a sign that the

* This, I think, is certainly not the species known to me as *alternans*, F., with which it is placed in Gemminger's Catalogue. The sixth interstice of the elytra is a little narrower than the fifth and seventh, which are nearly smooth.

† Translated by E. E. Austen from the 'Zoologischer Anzeiger,' Bd. xx. No. 543 (October 21, 1897), pp. 409-412.